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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,872	10/10/2001	Masaaki Suzuki	33773M031	5591

7590 12/11/2003  
SMITH, GAMBRELL & RUSSELL, LLP  
Suite 800  
1850 M Street, N.W.  
Washington, DC 20036

EXAMINER
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ROSE, ROBERT A

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/972,872**

Applicant(s)  
**Suzuki et al**

Examiner  
**Robert Rose**

Art Unit  
**3723**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Sep 22, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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### DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-7, and 9-10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Scholz et al (British patent No. 1215064). Scholz et al discloses a grinding wheel comprising all of the subject matter set forth in applicant's claims above. Note coolant pool formed by annular cavity(7) which confines the coolant to an annular region before delivery to the diamond abrasive segments(5) by way of inclined passageways(6). The coolant pool is deemed to meet the limitation of being "open inward in a radial direction", since it possesses an annular opening(8) which extends radially inward with respect to the central axis of the tool. With regard to claim 3, the coolant pool of Scholz et al is defined by an upper inclined surface (inclined wall which merges into vertical side wall above passage(6) in figure 1), and a horizontal projecting surface (floor of cavity(7)) which extends outward in the radial direction below the upper inclined surface.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scholz et al(British No. 1215064) in view of Japan('338). To provide notches or holes upstream of the coolant pool for delivery of coolant therethrough, for even distribution of coolant around the annular cavity would have been obvious in view of Japan('338).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scholz et al in view of Metzger et al. To angle the coolant guide grooves to one side in a circumferential direction to allow centrifugal force to aid in distribution of the coolant would have been obvious in view of Metzger et al.

6. Applicant's arguments filed September 22, 2003 have been fully considered but they are not persuasive. Applicant has argued that the coolant pool in Scholz et al does not open inward in a radial direction. However, the recitation is deemed sufficiently broad as to be readable on the cavity(7) of Scholz et al, since there is an opening(8) and it extends radially, thus the coolant pool formed by the cavity is deemed to be "open inward in a radial direction". Japan('338) was applied to teach the expediency of providing notches or holes upstream of the coolant pool to aid in evenly distributing the coolant around the annular cavity, while Metzger et al was applied to teach angling the coolant guide grooves, to allow the tool motion to aid in forcing the liquid coolant to the grinding stone segments.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

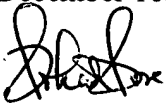
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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication should be directed to Robert Rose at telephone number (703) 308-1360.

rr

December 10, 2003.



ROBERT A. ROSE  
PRIMARY EXAMINER  
ART UNIT 323